The Family-Group Names of the Ichneumoninae (Hymenoptera: Ichneumonidae)

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Abstract.—The family-group names in the subfamily Ichneumoninae are listed. Valid names are in accordance with the *International Code of Zoological Nomenclature* and differences with the names used by Townes are discussed. The historical background to Townes' rejection of certain Opinions of the International Commission for Zoological Nomenclature is examined; we conclude Townes was in error.

The subfamily Ichneumoninae constitutes an exceedingly large and diverse group of parasitoid wasps, and is one of the most taxonomically and nomenclaturally confusing groups of ichneumonids. The genera were never revised by Townes as part of his monographs of ichneumonid subfamilies. His taxonomic ideas on the subfamily were recorded in the regional catalogs put out by him and his collaborators (Townes *et al* 1961; Townes et al 1965: Townes & Townes 1966; Townes & Townes 1973). These groupings and generic concepts are often at odds with those of other authors, most notably Heinrich, who published monographs on the ichneumonines of the Nearctic, sub-Saharan Africa, and Southeast Asia. The situation is especially confusing because Townes based family-group names on the oldest included genus and refused to recognize the validity of certain Opinions issued by the International Commission for Zoological Nomenclature (hereafter referred to as "the Commission") (Townes 1969). While Heinrich endeavored to use nomenclature in accordance with the International Code of Zoological Nomenclature (International Commission for Zoological Nomenclature 1985; hereafter referred to as "the *Code*"), he sometimes used junior synonyms of his own authorship in preference to older names of other authors or failed to cite proper dates and authorship for family-group names (cf. Protichneumonini Heinrich, 1934 vs. Heresiarchini Ashmead, 1900, and Ichneumonini Ashmead, 1895 instead of Ichneumonini Latreille, 1802 (Heinrich 1977: 10, 57).

TOWNES AND OPINIION 159

Townes (1957, 1969) wrote at length about his reasons for considering certain Opinions of the Commission invalid. The following summarizes Townes' general views: "There is, however, a spurious "Opinion of the International Commission" (no. 178) that was published under the personal responsibility of Francis Hemming, without the knowledge or consent of the International Commission. and without an official vote of the Commission on the matter. Citations of this "Opinion" have been misleading. (Townes & Townes 1981). Most hymenopterists, outside of ichneumonid specialists, do not accept Townes' arguments (Day 1981 is an exception). Townes' extensive ichneumonid work has lead many

students of that group to follow his nomenclature. We do not, however, accept Townes' position or his supporting version of history; a detailed account of our view is given in Appendix I. Opinion 159, which deals with application of the ichneumonid names *Ichneumon*, *Pimpla*, and *Ephialtes*, is considered by us to be a valid publication of the Commission.

TRIBAL CONCEPTS

Correct nomenclature for family-group taxa in Ichneumonidae, excluding Ichneumoninae, has been published by Fitton & Gauld (1976; 1978). We here present the results of our investigations of ichneumonine family-group names, using the *Code* to determine the validity of the 46 names.

As mentioned above, Townes and Heinrich disagreed on the matter of tribal boundaries and composition (Gauld 1984: 184–185). In the absence of a worldwide monographic treatment of the subfamily, we have for the most part adopted the tribal classification used by Gauld (1984). Townes had intended to treat the subfamily as a fifth volume of his series of generic monographs but funding and health problems interfered. Townes' thoughts on ichneumonine classification are reflected in his regional catalogs and in the arrangement of the American Entomological Institute collection.

Before proceeding with a listing of the family-group names, we give a brief consideration of problems in certain tribes and subtribes.

1. Alomyini–Phaeogenini–Heterischnini. Confusion reigns concerning the composition of the tribe. European authors (Perkins 1959; Diller 1981; Rasnitsyn & Siitan 1981) have traditionally placed *Alomya* in a tribe or subfamily of its own. Townes consistently put it with the group of genera, centered about *Phaeogenes*, that previously cited workers referred to as Phaeogenini. Townes believed *Alomya* to be closely related to *Cen*- teterus and Colpognathus, genera placed by others in Phaeogenini (Townes, pers. comm. to DBW). Moreover, Townes placed the genera Heterischnus and Lusius in a separate tribe, Heterischnini. Perkins, Diller, and Rasnitsyn & Siitan have all maintained Heterischnus in the Phaeogenini. Wahl is examining the relationships of these genera as part of a forthcoming revision; preliminary results indicate that all the aforementioned genera constitute a monophyletic group, and they are here treated as one tribe. With the inclusion of Alomya, the correct tribal name is Alomyini; Townes & Townes (1951: 276) having made a first-revisor decision between the Förster names Alomyoidae and Phaeogenoidae (published simultaneously in 1869). The subtribal divisions of Diller (1981; 1994) are not used here, pending further study.

2. Platylabini-Eurylabini-Zimmeriini. Townes (Townes et al 1961; Townes et al 1965; Townes & Townes 1973) consistently placed the genera Eurylabus and Cotiheresiarches (= Zimmeria) in the Platylabini. Other authors (Heinrich 1967, 1974; Perkins 1959; Rasnitsyn & Siitan 1981) put them in the Eurylabini and Zimmeriini, respectively. When Heinrich (1934) first described the Eurylabini, he recognized the Eurylabus group and the Goedartia group. Townes (Townes et al 1961) broke up the tribe, placing Eurylabus in the Platylabini and the Goedartia group in its own tribe, Goedartiini. Neither Eurylabus nor Cotiheresiarches exhibits the characteristic small convex clypeus of Platylabus and its relatives, and only Cotihersiarches has a flattened petiole. Until detailed studies are made on platylabine generic relationships, we believe it best for now to recognize Eurylabini and Zimmeriini as separate tribes.

3. Goedartiini–Compsophorini. When originally proposed by Townes *et al* (1961), Goedartiini included *Goedartia*, *Maraces*, *Charitojoppa*, and *Habrojoppa*. Compsophorini was described by Heinrich (1967) and included *Compsophorus*, *Oxyjoppa*, *Eccoptosagellus*, *Tosquinetia*, *Epijoppa*, *Charitojoppa*, *Habrojoppa*, and *Pyramidamblys*; *Goedartia* was explicitly excluded from the tribe. Townes (Townes & Townes 1973) synonymized Heinrich's Compsophorini under Goedartiini. Heinrich (1975) placed only *Goedartia*, *Maraces*, and *Pseudomaraces* in Goedartiini, retaining his original concept of two tribes.

Townes' concept of Goedartiini is based on: 1) a wide mandible that is not tapered apically, 2) the occipital carina that meets the hypostomal carina at the mandibular base, and 3) the cell 1+2Rs (areolet) of the fore wing that is pointed above, not truncate (Townes *et al* 1961). Heinrich (1967) pointed out that *Goedartia* differs from *Compsophorus* and its relatives in many details of the head and mesosoma, including the male flagellum. Until fundamental studies are made of the relationships within the stenopneusticine Ichneumoninae, it seems best to maintain Heinrich's concept of two tribes.

4. Ichneumonini. As mentioned previously, we accept that Opinion 159 of the Commission was validly issued. Accordingly, Ichneumonini is the correct name for the tribe that Townes called Joppini. Gyrodontini was used by Carlson (1979) due to Heinrich's belief that Joppini was strictly a Neotropical group (G. Heinrich, pers. comm. to R.W. Carlson). If one believes the Townes position to be correct, it should be noted that Joppini is the correct tribal name. The Joppini of Townes and Ichneumonini of Heinrich are essentially the same except that Heinrich placed Pseudoplatylabus, Acanthojoppa, and related genera in the Joppocryptini (referred to as Acanthojoppini in Heinrich's publications) and placed Tetragonochora in a tribe of its own (Heinrich, 1934).

5. **Amblytelina**. Amblytelina based on *Amblyteles* Wesmael is a junior homonym of Amblytelides Blackburn, 1892 (Blackburn, 1892) based on the coleopterous genus *Amblytelus* Erichson (Carabidae). Carl-

son (1979) emended Amblytelina to Amblytelesina but this is not in accordance with the *Code*, as such cases are to be referred to the Commission. A request to the Commission is being prepared.

6. Protichneumonini-Heresiarchini. Townes called this tribe Ichneumonini, due to his views on the validity of Opinion 159. Carlson (1979) and Gupta (1987) have used this interpretation as well, but all other authors have used Protichneumonini. Depending upon the treatment of Heresiarches and related genera, however, Protichneumonini may not be the correct name. Perkins (1959) and Rasnitsyn & Siitan (1981) maintain Heresiarches in a separate tribe, Heresiarchini. Townes always kept the genus in his Ichneumonini and Heinrich did likewise in the equivalent Protichneumonini. Heinrich (Heinrich 1960: 21) discussed the situation and he later recognized the group as a subtribe of Protichneumonini. This arrangement necessitates changing the tribal name to Heresiarchini, as pointed out by Perkins (1959: 28fn).

7. Trogini. Trogini based on *Trogus* Panzer is a junior homonym of Trogidae MacLeay, 1819 (MacLeay, 1819), based on the coleopterous genus *Trox* Fabricius (Trogidae). Carlson (1979) emended Trogini to Trogusini but this is not in accordance with the *Code*, as such cases are to be referred to the Commission. A request to the Commission is being prepared.

Heinrich placed *Callajoppa* and related genera in the Trogini as a subtribe, Callajoppina. Townes instead put these genera in the Heresiarchini, restricting Trogini to the parasitoids of Papilionidae and other Papilionoidea. This arrangement is followed here but it should be noted that the *Callajoppa*-group is part of a continuum linking certain Heresiarchini with the Trogini (Gauld 1984: 184–185; Heinrich 1968: 82, 1977: 284), thus making the placement of this group in one tribe or another a subjective decision.

FAMILY-GROUP NAMES OF THE ICHNEUMONINAE

ICHNEUMONINAE Latreille, 1802.

- 1. Alomyini Förster, 1869 (incl. Heterischnini of Townes)
 - Alomyoidae Förster, 1869: 144, 194. Typegenus: *Alomya* Panzer.
 - Phaeogenoidae Förster, 1869: 144, 191. Type-genus: *Phaeogenes* Wesmael.
 - Dicaelotina Holmgren, 1889: 343. Type-genus: *Dicaelotus* Wesmael.
 - Diadromina Holmgren, 1889: 345. Type-genus: *Diadromus* Wesmael.
 - Epitomina Holmgren, 1889: 347. Type-genus: *Epitomus* Förster.
 - Gnathoxina Holmgren, 1889: 344. Type-genus: *Gnathoxys* Wesmael.
 - Herpestomina Holmgren, 1889: 344. Typegenus: *Herpestomus* Wesmael.
 - Oronotina Holmgren, 1889: 343. Type-genus: Oronotus Wesmael.
 - Stenodotina Schmiedeknecht, 1903: 262. Type-genus: *Stenodontus* Berthoumieu.
 - Heterischnini Townes *et al*, 1961: 337, 458. Type-genus: *Heterischnus* Wesmael.
 - Chauviniina Diller, 1981: 95, 98. Type-genus: *Chauvinia* Heinrich.
 - Dicaelodontina Diller, 1994: 126. Type-genus: *Dicaelodontus* Diller.
- 2. **Platylabini** Berthoumieu, 1904. (= Pristicerotini of Townes)
 - Platylabini Berthoumieu, 1904: 4. Type-genus: *Platylabus* Wesmael.
 - [Pristaceratini Townes & Townes, 1951: 280. Not available under Article 13 of the *Code*. Incorrect spelling.]
 - Pristicerotini Townes *et al*, 1961: 393, 458. Type-genus: *Pristiceros* Gravenhorst.

3. Eurylabini Heinrich, 1934. Eurylabini Heinrich, 1934: 64-67. Type-ge-

- nus: *Eurylabus* Wesmael.
- 4. Zimmeriini Heinrich, 1934.
 - [Zimmerini Heinrich, 1934: 67. Type-genus: (Zimmeria Heinrich) = Cotiheresiarches Telenga. Incorrectly formed stem.]
 - Zimmeriini Heinrich; Rasnitsyn & Siitan, 1981: 510. Justified emendation.

5. Ceratojoppini Heinrich, 1938.

Ceratojoppini Heinrich, 1938: 25, 121. Typegenus: *Ceratojoppa* Cameron. 6. Ctenocalini Heinrich, 1938.

Ctenocalini Heinrich, 1938: 25, 40-41. Typegenus: *Ctenocalus* Szepligeti.

7. Goedartiini Townes et al, 1961.

Goedartiini Townes *et al*, 1961: 399, 458. Type-genus: *Goedartia* Boie.

8. Compsophorini Heinrich, 1967.

[Compsophorina Heinrich, 1962: 688. Not available under Article 13 of the *Code*.]Compsophorini Heinrich, 1967: 25. Typegenus: *Compsophorus* Saussure.

9. Ischnojoppini Heinrich, 1938.

Ischnojoppini Heinrich, 1938: 25, 117. Typegenus: Ischnojoppa Kriechbaumer.

10. Listrodromini Förster, 1869.

Listrodromoidae Förster, 1869: 144, 194. Type-genus: *Listrodromus* Wesmael.

- 11. **Oedicephalini** Heinrich, 1934. (= Notosemini of Townes)
 - Oedicephalini Heinrich, 1934: 67, 118-119. Type-genus: *Oedicephalus* Cresson.
 - Notosemini Townes *et al*, 1961: 338, 459. Type-genus: *Notosemus* Förster.
- 12. Ichneumonini Latreille, 1802. (= Joppini of Townes in part)
 - (The following are *incertae sedis* within the tribe, as the type genera were never formally assigned to a subtribe by Heinrich:
 - Joppinen Kriechbaumer, 1898: 2. Type-genus: Joppa Fabricius.
 - Merolidini Brèthes, 1909. Type-genus: *Merolides* Brèthes. (The type and sole specimen of *Merolides arechavaletai* Brèthes is lost; Townes (1966; pers. comm.) placed it in Joppini, near *Limerodes*.)
 - Tetragonochorini Heinrich, 1934: 64, 67. Type-genus: *Tetragonochora* Kriechbaumer. (Townes (Townes & Townes, 1966) placed this genus in his Joppini.)
- a. Ichneumonina Latreille, 1802.

Ichneumonides Latreille, 1802: 318. Typegenus: Ichneumon Linnaeus.

[Pterocorminae Heinrich, 1949: 256. Not available under Article 13 of the *Code*.]

b. Gyrodontina Schmiedeknecht, 1902.

Gyrodontini Schmiedeknecht, 1902: 9, 28. Type-genus: *Gyrodonta* Cameron. Cratichneumonina Heinrich, 1967: 27. Type-genus: Cratichneumon Thomson.

[c. Amblytelina Viereck, 1918.]

[Amblytelinae Viereck, 1918: 74. Type-genus: Amblyteles Wesmael. Amblytelina based on Amblyteles Wesmael is a junior homonym of Amblytelides Blackburn, 1892 (Blackburn, 1892: 85), based on the coleopterous genus Amblytelus Erichson (Carabidae)]

[Amblytelesina Carlson, 1979: 507. Illegal emendation. Article 55(b) of the *Code*.]

d. Hoplismenina Heinrich, 1967.

Hoplismenina Heinrich, 1967: 26. Type-genus: *Hoplismenus* Gravenhorst.

e. Aethioplitina Heinrich, 1967.

Aethioplitina Heinrich, 1967: 27. Type-genus: *Aethioplites* Heinrich.

13. Joppocryptini Viereck, 1918.

Joppocryptinae Viereck, 1918: 73. Type-genus: Joppocryptus Viereck.

Acanthojoppini Heinrich, 1934: 65, 67, 138. Type-genus: (*Acanthojoppa* Cameron) = *Eccoptosage* Kriechbaumer. Townes (1966) placed this genus in his Joppini.

- 14. Heresiarchini Ashmead, 1900 (= Ichneumonini of Townes; includes part of Trogini of Heinrich).
- a. Protichneumonina Heinrich, 1934.
 Protichneumonini Heinrich, 1934: 66, 84.
 Type-genus: *Protichneumon* Thomson.
- b. Heresiarchina Ashmead, 1900.
 Heresiarchini Ashmead, 1900: 567. Type-genus: *Heresiarches* Wesmael.
- c. Apatetorina Heinrich, 1967.
 Apatetorina Heinrich, 1967: 26, 50. Type-genus: *Apatetor* Saussure.
- d. Callajoppina Heinrich, 1962.
 Callajoppina Heinrich, 1962: 809–810. Typegenus: *Callajoppa* Cameron.
- [15. Trogini Förster, 1869.]
 - [Trogoidae Förster, 1869: 144, 188. Type-genus: *Trogus* Panzer. Trogini based on *Trogus* Panzer is a junior homonym of Trogidae MacLeay, 1819 (MacLeay, 1819: 136), based on the coleopterous genus *Trox* Fabricius. Although Förster cites *Trogus* Gravenhorst, Gravenhorst includ-

ed the type species of *Trogus* Panzer in his treatment of the genus and had the same generic concept]

[Trogusina Carlson, 1979: 538. Illegal emendation. Article 55(b) of the *Code*.]

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LITERATURE CITED

- Anonymous, 1943. The official record of the approval by the Twelfth International Congress of Zoology of the report submitted by the International Commission on Zoological Nomenclature and of the adoption by the Congress of the resolutions submitted by the International Commission. Bulletin of Zoological Nomenclature 1: 63.
- Ashmead, W.H. 1900. Order Hymenoptera. In Smith, J.B. 1900. Insects of New Jersey; a list of the species occurring in New Jersey, with notes on those of economic importance. MacCrellish & Quigley, Trenton. 755 pp.
- Berthomieu, V. 1904. Fam. Ichneumonidae, subfam. Ichneumoninae. Genera Insectorum 18: 1–87.
- Blackburn, T. 1892. Notes on Australian Coleoptera, with descriptions of new species. Parts. X-XII. Proceedings of the Linnean Society of New South Wales (2) 7: 65–151.
- Brèthes, J. 1909. Himenópteros nuevos de las Républicas del Plata y del Brasil. Anales del Museo nacional de historia natural de Buenos Aires 19: 49–69.
- Carlson, R.W. 1979. Family Ichneumonidae. In: K.V. Krombein, P.D. Hurd, D.R. Smith, and B.D. Burke (eds.), Catalog of Hymenoptera in American North of Mexico, vol. 1, Smithsonian Institution Press, Washington, D.C. 1198 pp.
- Day, M.C. 1981. A revision of *Pompilus* Fabricius (Hymenoptera: Pompilidae) with further nomenclatural and biological considerations. *Bulletin of the British Museum (Natural History) (Entomology)* 42(1): 1–42.
- Diller, E. 1981. Bermerkungen zur Systematik der Phaeogenini mit einem vorläufigen Katalog der Gattungen (Hymenoptera, Ichneumonidae). Entomofauna 2: 93–111.
- Diller, E. 1994. Beschreibungen einer neuen Subtribus, neuer Gattungen und Arten der Tribus Phaeogenini (Insecta: Hymenoptera: Ichneumonidae: Phaeogenini). Annelen des Naturhistorischen Museums in Wien 96B: 125–136.
- Fitton, M.G. & Gauld, I.D. 1976. The family-group

names of the Ichneumonidae (excluding Ichneumoninae) (Hymenoptera). *Systematic Entomology* 1: 247–258.

- Fitton, M.G. & Gauld, I.D. 1978. Further notes on family-group names of lchneumonidae (Hymenoptera). Systematic Entomology 3: 245–247.
- Förster, A. 1869. Synopsis der Familien und Gattungen der Ichneumoniden. Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens 25: 135–221.
- Gauld, I.D. 1984. An introduction to the Ichneumonidae of Australia. British Museum (Natural History), London. 413 pp.
- Gupta, V.K. 1987. The Ichneumonidae of the Indo-Australian Area (Hymenoptera). *Memoirs of the American Entomological Institute* 41: 1–1210.
- Heinrich, G. 1934. Die Ichneumoninae von Celebes: bearbeitet auf Grund der Ausbeute der Celebesexpedition G. Heinrich 1930–1932. Mitteilungen aus dem Zoologischen Museum in Berlin 20: 1–263.
- Heinrich, G. 1938. Les Ichneumonides de Madagascar. 3. Ichneumonidae-Ichneumoninae. Mémoires de l'Académie Malgache 25: 1–138.
- Heinrich, G. 1949. (Hym. Ichneum.) Die Pterocorminae der Hahnheide. Bombus 60: 257–258.
- Heinrich, G. 1960. Synopsis of Nearctic Ichneumoninae Stenopneusticae with particular reference to the northeastern region (Hymenoptera). I. Canadian Entomologist Supplement 15: 1–87.
- Heinrich, G. 1962. Synopsis of Nearctic Ichneumoninae Stenopneusticae with particular reference to the northeastern region (Hymenoptera). VI. Canadian Entomologist Supplement 27: 677–802.
- Heinrich, G. 1967. Synopsis and reclassification of the Ichneumoninae Stenopneusticae of Africa south of the Sahara (Hymenoptera). 1: 1–250. Farmington State College Press, Maine.
- Heinrich, G. 1968. Burmesische Ichneumoninae IV. Entomologisk tidskrift 89: 77–106.
- Heinrich, G. 1974. Burmesische Ichneumoninae VIII. Annales Zoologici 31: 407–457.
- Heinrich, G. 1975. Burmesische Ichneumoninae X. Annales Zoologici 32: 441–514.
- Heinrich, G. 1977. Ichneumoninae of Florida and neighboring states (Hymenoptera: Ichneumonidae, subfamily Ichneumoninae). Arthropods of Florida and neighboring land areas 9: 1–350.
- Hemming, M.F. 1943a. On the Lisbon decisions of the International Commission on Zoological Nomenclature. Bulletin of Zoological Nomenclature 1: 1–4.
- Hemming, M.F. 1943b. The official record of proceedings of the International Commission on Zoological Nomenclature at their session held at Lisbon in September 1935. Bulletin of Zoological Nomenclature 1: 5–49.
- Hemming, M.F. 1943c. The report submitted by the International Commission on Zoological Nomen-

clature to the Twelfth International Congress of Zoology, Lisbon, September 1935. *Bulletin of Zoological Nomenclature* 1: 53–69.

- Hemming, M.F. 1945a. Opinion 159. Opinions and declarations rendered by the International Commission on Zoological Nomenclature 2: 275–290.
- Hemming, M.F. 1945b. Plenary conference between the President of the International Commission on Zoological Nomenclature and the Secretary to the International Commission. Bulletin of Zoological Nomenclature 1: 70–86.
- Holmgren, A.E. 1889. Ichneumonides pneustici. *Ichneumonologia Suecica* 3: 343–466.
- International Commission for Zoological Nomenclature. 1985. International Code of Zoological Nomenclature, Third Edition, Adopted by the XX General Assembly of the International Union of Biological Sciences. International Trust for Zoological Nomenclature/University of California Press, London. 338 pp.
- Kriechbaumer, J. 1898. Beitrag zu einer Monographie der Joppinen, einer Unterfamilie der Ichneumoniden. Berliner entomologische Zeitschrift 43: 1–166.
- Latreille, P.A. 1802. Histoire Naturelle, Générale et particulière, des Crustacés et des Insectes, Tome troisième. Paris, 468 pp.
- MacLeay, W.S. 1819. Horae entomologicae: or essays on the annulose animals 1(1): 1–524.
- Perkins, J.F. 1959. Ichneumonidae, key to subfamilies and Ichneumoninae 1. Handbook for the Identification of British Insects 7(2ai): 1–116.
- Rasnitsyn, A.P. & Siitan, U.V. 1981. Ichneumoninae [in Russian]. In D.R. Kasparyan (ed.), [A guide to the identification of insects of the European part of the USSR. Vol. 3. Hymenoptera]. Opredeliteli faume SSSR, no. 129: 1–688. Nauka Press, Moscow. 688 pp.
- Schmiedeknecht, O. 1902. *Opuscula Ichneumonologia* 1(1): 1-80. Blankenburg i Thüringen.
- Schmiedeknecht, O. 1903. Opuscula Ichneumonologia 1(4): 241–320. Blankenburg i Thüringen.
- Stiles, C.W. 1936. Notice of possible suspension of rules of nomenclature in certain cases. *Science* 83: 552–553.
- Townes, H. 1944–1945. A catalogue and reclassification of the Nearctic Ichneumonidae. *Memoirs of* the American Entomological Society 11(1–2): 1–925.
- Townes, H. 1957. The name *Psammochares* versus *Pompilus. Systematic Zoology* 6: 151–156.
- Townes, H. 1969. The genera of Ichneumonidae, vol. 1. *Memoirs of the American Entomological Institute* 11: 1–300.
- Townes, H., Momoi, S. & Townes, M. 1965. A catalogue and reclassification of the Eastern Palearctic Ichneumonidae. *Memoirs of the American En*tomological Institute 5: 1–661.
- Townes, H. & Townes, M. 1951. Family Ichneumonidae. In: C.F.W. Muesebeck, K.V. Krombein &

H.K. Townes. Hymenoptera of America North of Mexico—synoptic catalog. *Agriculture Monograph* 2: 1–1420.

- Townes, H. & Townes, M. 1966. A catalogue and reclassification of the Neotropic Ichneumonidae. *Memoirs of the American Entomological Institute* 8: 1–367.
- Townes, H. & Townes, M. 1973. A catalogue and reclassification of the Ethiopian Ichneumonidae. *Memoirs of the American Entomological Institute* 19: 1–416.
- Townes, H. & Townes, M. 1981. A revision of the Serphidae (Hymenoptera). Memoirs of the American Entomological Institute 32: 1–541.
- Townes, H., Townes, M. & Gupta, V.K. 1961. A catalogue and reclassification of the Indo-Australian Ichneumonidae. *Memoirs of the American Entomological Institute* 1: 1–522.
- Viereck, H.L. 1918. A list of families and subfamilies of Ichneumon-flies or the superfamily Ichneumonoidea (Hymenoptera). *Proceedings of the Biological Society of Washington* 31: 69–74.

APPENDIX 1

Townes' arguments regarding the invalidity of Opinion 159 were put forth in Townes (1957, 1969); his version of the relevant events may be summarized as follows from these two references except where otherwise noted:

1913—At the Monaco International Congress of Zoology, the Commission was delegated authority to suspend the Rules and declare on various cases, on the authority of the Congress.

Suspensions could be made only under the following procedures:

- Not less than one year's notice that such a suspension is under consideration in two or more of five specified publications.
- b. The votes of the Commission is unanimous in favor of suspension.
- c. If the vote is a ³/₃ majority of the full Commission, but not unanimous, in favor of suspension, the Commission must report the facts to the next Congress (where specified arbitration would be made.)
- **1935**—J.C. Bradley presented a list of generic names at the Commission meeting in Lisbon, requesting suspension of the Rules in these cases. Bradley requested new type-species designations for *Ichneumon, Pimpla*, and *Ephialtes*. Six out of 18 Commissioners attended the Lisbon meeting and six temporary Commissioners were appointed. Ten out of 12 were present when the Bradley proposal was presented and approved. No notice of intention to consider these names had been published in advance of the Lisbon meeting.

- **1936**—When it was pointed out that the required advance notice had not been published regarding the proposed changes, the Commission published notices in 1936 that it would officially consider Bradley's list at some future time.
- **1939**—Karl Jordan and Francis Hemming met and made a decision between themselves. The authority for their action was that upon adjournment of the Lisbon sessions, they were to "take such other action as might appear to them necessary or expedient . . . to give effect to the decisions reached by the Commission at the Lisbon Session . . ." (Hemming 1945a). "The direction upon adjournment of the Lisbon meeting of the Commissioners to Jordan and Hemming to put into effect the decisions of the meeting did not give Jordan and Hemming power to *make* the decisions . . . " (Townes 1957).
- **1943**—Following this, Bradley's proposals never came up again for decision. Townes contacted James L. Peters, the acting secretary at Lisbon and asked whether any further action had been taken on the Bradley names. Peters replied that the question of the ichneumonid names had never been circulated. Furthermore, he stated that "no vote had been taken on the subject of these three names . . ." (Townes 1969).

Townes thus concluded that the Commission never took action. According to Townes, Hemming argued the requirements for suspending the Rules had been met by: 1) a vote in 1935 before publication of the cases, 2) publication in 1936 that the cases would be considered, 3) the fact that no Commissioner wrote him after 1936 with objections. Townes rejects these arguments because: 1) the vote must be taken after publication, 2) only 12 Commissioners were in Lisbon and only ten in the actual meeting, while the requirement is for a unanimous vote by all 18 Commissioners, 3) awaiting unsolicited letters is not the same as an actual request for a vote. Finally, Townes noted that the Bradley petition, signed by 59 hymenopterists, was circulated in 1928 and is not the same as that presented in 1935, except in the case of Cryptus. The type-species for Ichneumon, Ephialtes, and Pimpla are the as same recognized by Townes.

This recounting, however, omits crucial information. While the Monaco Congress listed the conditions under which the Rules could ordinarily be suspended, Secretary C.W. Stiles (*Compte Rendu* 1913: 892-893) pointed out the following: "Upon a unanimous vote, "By-Laws" may be temporarily "suspended", that is to say, they may be set aside and the body takes action on the matter under consideration unrestricted by the provisions of the By-Laws; and such action, if taken under a "Special Rule" framed for the case at hand or without reference to any rules, except the "Constitution" and recognized "Parliamentary Rules", has all the validity of an action taken under the "By-Laws". Thus, if the Congress confers upon the Commission the plenary power to suspend the Règles in any given case, it practically says to the Commission: "If you carry out the precautions provided for in the Supplemental Report, you may decide any given case arbitrarily without reference to the Règles or you may make a "Special Rule" to govern that particular case, and this Congress will accept your decision as being just as authoritative as if you had made this ruling strictly in accord with the Code." A plan of this kind is thoroughly in accord with recognized parliamentary customs and it has the great advantage of avoiding the necessity of introducing "Exceptions" to the Rules." This is the background against which the events of 1935 occurred.

Contrary to Townes' statement, Bradley's petition of 1935 was the same as that circulated in 1928. It was presented to the International Committee of Entomological Nomenclature (ICEN) in Madrid in the week preceding the opening of the Twelfth International Congress of Zoology in Lisbon (Hemming 1943a). The petition was considered and a number of proposals were made by the ICEN concerning resolution of the problems (Hemming 1945a: 282).

The ICEN's recommendations for this and other cases were laid before the Commission at its second meeting on 16 Sept. 1935. Because it had not been possible for the Commission to meet prior to the Congress, there were only 2½ days to discuss the cases and prepare a report to the Congress. President Jordan felt it best to take the pending cases into immediate consideration and "for this purpose suspend the By-laws of the Commission to such extent as might be necessary for the period of the present Congress." (Hemming 1943b: 10-11). At that meeting, 10 out of 11 Commissioners present in Lisbon were in attendance; Walter Arndt, an alternate, did not attend the five Commission meetings and Teiso Esaki was elected to the Commission at this particular session. The attending Commissioners passed the usual parliamentary unanimous consent to suspend the By-laws (note this was not an emendation of the By-Laws, which would have required an affirmative vote of 12 members (ICZN By-laws, Article VIII, Sect. 1)). It was agreed to give immediate consideration to all submitted cases that it was felt had reached the stage at which a decision could be made. To give effect to this, use would be made of the By-law suspension that had just been agreed upon. Since this involved violating the normal procedures for "suspension of the Règles" in that the prescribed advertisement had not been published one year previously, the various cases and the Commission's decisions would be advertised as soon as possible after the conclusion of the Lisbon meetings and no Opinions would be published until after one year from the date of the advertisement's dispatch. Nowhere does Townes, in his recounting,

mention that the Commission suspended its By-laws, as provided by parliamentary procedures.

At the Commission's third session, it agreed "under suspension of the Rules" to set aside current type designations for the names on the Bradley list and declare new ones. For ichneumonids,the Commission agreed to reject *Ephialtes* Schrank 1802 and to designate the following type species:

Ichneumon L.: Ichneumon extensorius L.

Pimpla Fabricius: Ichneumon instigator Fabricius

Ephialtes Gravenhorst: Ichneumon manifestor L.

The Commission "came to the conclusion that the more radical of the proposals submitted by the [ICEN] provided the most satisfactory solution of the difficulties presented by the present case." (Hemming 1945a: 282). Townes neglected to mention the ICEN involvement and chose to portray the Commission decisions as part of an illegal and arbitrary process.

The Commission's fifth meeting on 18 Sept. 1935 saw 11 of the 12 Commissioners present; it was agreed that President Jordan "and the new Secretary, when elected, should be authorized to make such arrangements, and to take such actions, as might appear to them necessary or expedient . . . " and "to secure the due publication of the Opinions agreed upon from time to time by the Commission at their Lisbon Session." (Hemming 1943b: 48). The Commission also unanimously agreed to adopt as their report to the Congress the draft prepared by Hemming (ibid., p. 47). This report (Hemming 1943c), which duly noted the suspension of the By-laws, was approved by the Congress (Anonymous, 1943).

Notice of the possible suspension of the Rules was published in May 1936 (Stiles 1936). Except for Townes' allegation, there is no evidence that the advertisement was published at the urging of scientists concerned that no published notices had been made prior to the Lisbon sessions. It was done on the authority of the Commission operating under the suspension of the By-laws.

After the 1936 advertisement, one communication was received regarding the ichneumonid names. It bore the signature of S.A. Rohwer in the name of the Committee on Nomenclature of the Entomological Society of Washington (Hemming 1945a). The letter was against the proposed new type-species; appended to the letter was a note of dissent, in favor of the proposed *nomina conservanda*, by R.A. Cushman, one of the prominent ichneumonologists of the day.

Copies of the letter were immediately sent to the other Commissioners but no member expressed himself as agreeing with the Rohwer point of view (ibid., p. 286). Jordan and Hemming met on 19 June 1939 under the authority of the Resolution adopted by the Commission on 18 Sept. 1935 (Hemming 1945b). They took note that no Commissioner had responded to the Rohwer communication. In their opinion, no new facts had been brought forth that were not before

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the Commission in 1935. Given this, they "decided the proper course . . . was to give effect to the decisions in this matter reached by the International Commission at the Lisbon Session . . . and therefore that Opinions should be issued as soon as possible." (Hemming 1945a: 287). The resulting Opinion 159 was published in 1945 (ibid.).

Townes was preparing to publish a catalog of Nearctic Ichneumonidae (Townes 1944-1945) when he wrote to Peters in 1943. He took Peters' advice and used names based on priority; they both apparently expected the matter to be voted on by the Commission, with the outcome uncertain. Jordan and Hemming, however, were given the authority to make decisions by virtue of the Commission acting under the valid suspension of the By-laws. Townes' objections to Hemming's listing of the usual procedures for suspending the Rules (i.e., one year's notice of suspension in two or more of five journals, etc) are irrelevant. Hemming apparently used these stock phrases as boilerplate.

At this point, the reader might wonder why such effort has been spent on an arcane issue. From our viewpoints as ichneumonologists, it is important that Townes' arguments be put to rest in order to attain a stable ichneumonid nomenclature. Outside Ichneumonidae, there always remains the possibility that someone will read Townes' version of events and raise havoc in groups that heretofore have attained relative nomenclatural stability.

In summary, rejection of Townes' arguments gives the following generic names:

Pimplinae

Ephialtini (= Pimplini of Townes)

ICZN name	Townes name
<i>Ephialtes</i> Graven- horst, 1829	Pimpla Fabricius, 1804
(type-species: lch- neumon manifes- tor L.)	(type-species: Ichneumo manifestor L.)

Apechthis Förster, 1869	Ephialtes Schrank, 1802
(type-species: lch- neumon rufatus L.)	(type-species: lchneumon compunctor L.)
<i>Pimpla</i> Fabricius, 1804	<i>Coccygonimus</i> Saussure, 1892
(type-species: lch- neumon instiga- tor L.)	(type-species: Coccygomi- mus madecassus Saus- sure)
Ichneumoninae	
Ichneumonini (= Joppin	i of Townes)
ICZN name	Townes name
lchneumon L., 1758	Pterocormus Förster, 1850
(type-species: lch- neumon extenso- rius L.)	(type-species: <i>lchneumon</i> <i>latrator</i> Fabricius)
Heresiarchini (= lchneu chneumonini of Heinr	monini of Townes, Proti- ich)
ICZN name	Townes name
Coelichneumon Thomson, 1893	Ichneumon L., 1758
(type-species: Ich- neumon comita-	(type-species: Ichneumon comitator L.)

Townes name

Pimplini (= Ephialtini of Townes)

ICZN name

tor L.)

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